

**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	10/679,203	
	Filing Date	October 2, 2003	
	First Named Inventor	Andrew Mark Gutman et al.	
	Art Unit	2152	
	Examiner Name	Unassigned	
Total Number of Pages in This Submission	6	Attorney Docket Number	CISCO-8363

**ENCLOSURES (check all that apply)**

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): <b>Request to Correct Filing Receipt; copy of Filing Receipt; copy of 1<sup>st</sup> page of original patent 6,298,383.</b>		
<table border="1"><tr><td>Remarks</td><td></td></tr></table>			Remarks	
Remarks				

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	David B. Ritchie, Reg. No. 31,562 Thelen Reid & Priest LLP
Signature	
Date	1-12-2004

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name	Beatrice Orozco		
Signature		Date	1/13/2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Andrew Mark Gutman et al.  
SERIAL NO.: 10/679,203  
FILING DATE: October 2, 2003  
TITLE: Integration of Authentication Authorization and Accounting Service and Proxy Service  
ART UNIT: 2152  
EXAMINER: Unassigned

---

**CERTIFICATE OF MAILING**

I hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Office of Initial Patent Examination's Filing Receipt Corrections, Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313- 1450, on the date printed below:

Date:

1/13/04

Name:

Beatrice Orozco

Beatrice Orozco

---

OFFICE OF INITIAL PATENT EXAMINATION'S  
FILING RECEIPT CORRECTIONS  
COMMISSIONER FOR PATENTS  
P.O. BOX 1450  
ALEXANDRIA, VA 22313-1450

**REQUEST TO CORRECT FILING RECEIPT**

It is respectfully submitted that the Filing Receipt for the above-identified reissue patent application has an error. The title is spelled incorrectly; the correct spelling is "Integration of Authentication Authorization and Accounting Service and Proxy Service" and not "Integration of Authentication Authorization and Accounting Service Proxy Service" as indicated on the Filing Receipt. Please amend the Filing Receipt and appropriate records to reflect the correct title in the above referenced reissue patent application. A copy of the Filing Receipt is enclosed. In addition, also enclosed is a copy of original patent 6,298,383 which was filed with the reissue

patent application on October 2, 2003 for the above referenced patent application. Please note that it correctly lists the spelling of the title.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1698.

Respectfully submitted,  
THELEN REID & PRIEST LLP



Dated: January 12, 2004

---

David B. Ritchie  
Reg. No. 31,562

THELEN REID & PRIEST LLP  
P.O. Box 640640  
San Jose, CA 95164-0640  
Phone: (408) 292-5800  
Fax: (408) 287-8040

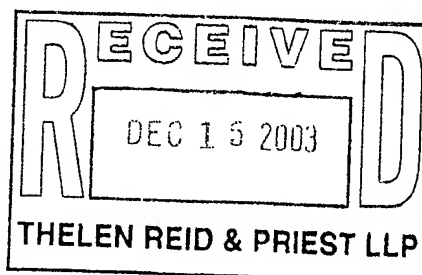


## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/679,203	10/02/2003	2152	3178	CISCO-8363	9	73	27

David B Ritchie  
Thelen Reid & Priest LLP  
PO Box 640640  
San Jose, CA 95164-0640



CONFIRMATION NO. 4568

## FILING RECEIPT



\*OC000000011463895\*

Date Mailed: 12/11/2003

Receipt is acknowledged of this reissue Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Andrew Mark Gutman, Foothill Ranch, CA;  
Aravind Sitaraman, Santa Clara, CA;  
Sampath Kumar Sthothra Bhasham, Santa Clara, CA;  
Kalpathi S. Suryanarayanan, Cupertino, CA;

## Domestic Priority data as claimed by applicant

This application is a REI of 09/225,247 01/04/1999 PAT 6,298,383

## Foreign Applications

Projected Publication Date: None, application is not eligible for pre-grant publication

Non-Publication Request: No

Reviewed By: MP Date: 1/9/04  
No Action Required: \_\_\_\_\_  
Action Required: X file

Early Publication Request: No

## Title

Integration of authentication authorization and accounting service proxy service

Mail log 40 Date 12/15/03

## Preliminary Class

CPI DOCKETED

DEC 24 2003

Excel \_\_\_\_\_ Date \_\_\_\_\_

---

**LICENSE FOR FOREIGN FILING UNDER  
Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



US006298383B1

(12) **United States Patent**  
Gutman et al.

(10) Patent No.: **US 6,298,383 B1**  
(45) Date of Patent: **Oct. 2, 2001**

(54) **INTEGRATION OF AUTHENTICATION  
AUTHORIZATION AND ACCOUNTING  
SERVICE AND PROXY SERVICE**

(75) Inventors: **Andrew Mark Gutman**, Foothill Ranch; **Aravind Sitaraman**; **Sampath Kumar Sthothra Bhasham**, both of Santa Clara; **Kalpathi S. Suryanarayanan**, Cupertino, all of CA (US)

(73) Assignee: **Cisco Technology, Inc.**, San Jose, CA (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/225,247**

(22) Filed: **Jan. 4, 1999**

(51) Int. Cl.<sup>7</sup> ..... **G06F 13/00**

(52) U.S. Cl. .... **709/229**

(58) Field of Search ..... **709/200, 202, 709/203, 223, 224, 227, 229**

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,763,191 8/1988 Gordon et al. .... 358/86  
4,922,486 5/1990 Lidinsky et al. .... 370/60  
4,962,497 10/1990 Ferenc et al. .... 370/60.1

(List continued on next page.)

**FOREIGN PATENT DOCUMENTS**

0 567 217 10/1993 (EP) ..... H04L/12/46  
99/53408 10/1999 (WO) ..... G06F/15/16

**OTHER PUBLICATIONS**

Bellovin, Steven M., "Problem Areas for the IP Security Protocols", Jul. 22-25, 1996, Proceedings of the Sixth Usenix UNIX Security Symposium, San Jose, CA.  
Active Software, Inc., "Active Software's Integration System", printed from <http://www.activesw.com/products/products.html>, on Jul. 24, 1998.

Ascend Communications, Inc., "Access Control Product Information", 4 pages, Undated.

Ascend Communications, Inc., "Remote Access Network Security", printed from <http://www.ascend.com/1103.html>, on Jul. 24, 1998, pp. 1-8.

Ascend Communications, Inc., "MultiVPN from Ascend Communications: Breaking Down the Barriers to VPNs", White Paper, 1998.

Bracho, Dr. Rafael, "Integrating the Corporate Computing Environment with Active Software", Nov. 18, 1998, Active Software, pp. 1-17.

Bracho, Dr. Rafael, "Mastering Corporate Computing with the ActiveWeb System", 1996, Active Software, Inc.

5,003,595 3/1991 Collins et al. .... 380/25

(List continued on next page.)

*Primary Examiner*—Robert Harrell

(74) *Attorney, Agent, or Firm*—Thelen Reid & Priest LLP; David B. Ritchie

(57) **ABSTRACT**

A single database maintained centrally hosts both proxy service data and authentication, authorization and accounting (AAA) data. Data is then copied to storage used locally by each system when both systems are instantiated. Therefore the ISP/Telco need not maintain two different data bases. A protocol gateway (PGW) is used to determine if the incoming user is a wholesale or retail user. The PGW filters the domain portion of the access request to locate a remote AAA service. If one such service is found, the PGW routes the communication via the proxy service to proxy it to the remote AAA service. The returned packet from the remote AAA service is then searched for an IP address to be assigned to the incoming user. If one is not found the PGW obtains a dynamically allocated IP address from a DHCP server (using an IP-Pool-ID if supplied in the returned packet from the remote AAA service). The same mechanism is used to forward accounting event packets from the NAS to the remote AAA server. The PGW may monitor more than one proxy and/or AAA service and load balance among them.

**30 Claims, 9 Drawing Sheets**

